

### REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested. Claims 1-16 are pending, Claims 4-6, 7-10, 12, 14, 15 and 16 having been amended by way of the present amendment.

In the outstanding Office Action Claims 6 and 7 were objected to as containing informalities; Claim 5 was objected to as being dependent upon a rejected base claim, but otherwise contains allowable subject matter; Claims 1 and 12-14 were rejected as being unpatentable over Cohen (U.S. Patent No. 6,681,031) in view of Dobashi (U.S. Patent Publication No. 2002/0126880); Claims 2-4, 10, 15 and 16 were rejected as being unpatentable over Cohen in view of Dobashi and in further view of Bongiovanni (U.S. Publication No. 2005/0041102); Claims 6 and 7 were rejected as being unpatentable over Cohen in view of Dobashi and in further view of Banh (U.S. Patent No. 5,150,426); Claims 8 and 9 were rejected as being unpatentable over Cohen in view of Dobashi and in further view of Kim (U.S. Patent No. 6,999,604); and Claim 11 was rejected as being unpatentable over Cohen in view of Dobashi, Bongiovanni and in further view of Kim.

In reply, Applicants first would to thank the Examiner for identifying allowable subject matter. Claim 5 has therefore been written in independent form and is believed to be in condition for formal allowance. The informality identified in Claim 6 has been corrected by way of the present amendment. Therefore it is believed that the objections to Claims 6 and 7 has been overcome.

Claim 1 is directed to an adaptive artificial vision method that, among other things, includes steps (c) extracting features from said delta image  $\Delta_t$  for obtaining a potential dynamic patch  $P_t$  which is compared with dynamic patches previously recorded in a first repertory  $R_d$  which is progressively constructed in real time from an initial void repertory, and (d) selecting the closest dynamic patch  $D_i$  in this first repertory  $R_d$  or if not sufficiently

close dynamic patch still exists, adding the potential dynamic patch  $P_t$  to the first repertory  $R_d$  and therefore obtaining and storing a dynamic patch  $D_i$  from the comparison of two successive images ( $I_{t-1}, I_t ; I_t, I_{t+1} ; \dots$ ) at each couple of synchronized timesteps ( $t_{-1}, t ; t, t_{+1} ; \dots$ ).

Thus, a repertory is initially void and a first repertory  $R_d$  is progressively constructed in real time. In contrast, in Cohen a predetermined number of gestures are identified and the different types of gestures are divided in different lines. Cohen provides an initial repertory which is not void and is progressively constructed in real time.

According to Cohen, a reference database includes a limited number of patches corresponding to a limited number of stereotype gestures (see Abstract “Feature position measure is used in conjunction with a bank of predictor bins seeded with the gesture parameters, and the system determines which bin best fits the observed motion.”).

As acknowledged in the outstanding Office Action, according to Cohen, in the identification process, a closest gesture in the reference bins will be selected and if there is none, then no gesture is identified (column 21, lines 54-64). Cohen thus discloses a non-flexible system which needs a preliminary identification of specific gestures and cannot be further expanded during a recognition process. This is a very substantial difference with respect to the subject matter defined by Claim 1.

Dobashi cannot reasonably be combined with Cohen because Dobashi relates to a face image recognition apparatus and a face image can hardly be defined as a recurring movement or element. Moreover, contrary to step c) in Claim 1, Dobashi requires a preset registration procedure (see page 6 [0090]) and cannot start with a void register. Furthermore, when a new reference feature amount is registered into the registration information holding section ([0086]), such new reference feature is considered as being a second class type of information ([0090]) “the old registration information is a feature amount registered by use of a preset

registration procedure and is highly worth holding and the new registration information is a feature amount extracted in the course of the recognition process and is less worth holding”). Accordingly, there is no incentive for a person of ordinary skill in the art to combine Dobashi and Cohen. Nevertheless, whether taken individually or in combination, neither Cohen nor Dobashi teach or suggest the claimed method since neither Dobashi or Cohen starts from a void register. Consequently it is respectfully submitted that Claim 1 patentably defines over Cohen in view of Dobashi.

Claims 2-4 and 6-14, as amended, all depend from Claim 1. Thus it is believed that these claims also patentably define over the asserted prior art.

Claim 15 relates to a corresponding system and therefore is of a different statutory class. But nevertheless, Claim 15 requires “selection means for selecting the closest dynamic patch  $D_i$  in the first memory means or if no sufficiently close dynamic patch still exists, for recording the potential dynamic patch  $P_i$  into the first memory means.” As discussed above with regard to Claim 1, Cohen describes a non-flexible system which needs a preliminary identification of specific gestures and cannot be further expanded during a recognition process. Dobashi does not cure this deficiency because it does not disclose particular memory means specifically adapted for storing dynamic patches representing elementary visual parts for describing characterized movements of objects. Thus it is respectfully submitted that no combination of Cohen in view of Dobashi teaches or suggests all the elements of Claim 15. Because Claim 16 depends from Claim 15 it is respectfully submitted that Claim 16 also patentably defines over the asserted prior art.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1-16, as amended, is patentably distinguishing over the prior art. The present application is therefore believed to

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be in condition for formal allowance and an early and favorable reconsideration of this rejection is therefore requested.

Respectfully submitted,

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